

<110> Fiscella, et al.

<120> Extracellular Matrix Polynucleotides, Polypeptides, and Antibodies

<130> PT054P1

<140> Unassigned

<141> 2001-10-17

<150> PCT/US01/11643

<151> 2001-04-11

<150> 60/198,123

<151> 2000-04-18

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<170> PatentIn Ver. 2.0

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Asp Lys Gly Ser Gly Asp Ser Ser Gln Val Thr Gln Val Ser Pro Gln  
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Arg Ile Ala Leu Arg Leu Arg Pro Asp Asp Ser Lys Asn Phe Ser Ile  
115 120 125

Gln Val Arg Gln Val Glu Asp Tyr Pro Val Asp Ile Tyr Tyr Leu Met  
130 135 140

Asp Leu Ser Tyr Ser Met Lys Asp Asp Leu Trp Ser Ile Gln Asn Leu  
145 150 155 160

Gly Thr Lys Leu Ala Thr Gln Met Arg Lys Leu Thr Ser Asn Leu Arg  
165 170 175

Ile Gly Phe Gly Ala Phe Val Asp Lys Pro Val Ser Pro Tyr Met Tyr  
180 185 190

Ile Ser Pro Pro Glu Ala Leu Glu Asn Pro Cys Tyr Asp Met Lys Thr  
195 200 205

Thr Cys Leu Pro Met Phe Gly Tyr Lys His Val Leu Thr Leu Thr Asp  
210 215 220

Gln Val Thr Arg Phe Asn Glu Glu Val Lys Lys Gln Ser Val Ser Arg  
225 230 235 240

Asn Arg Asp Ala Pro Glu Gly Phe Asp Ala Ile Met Gln Ala Thr  
245 250 255

Val Cys Asp Glu Lys Ile Gly Trp Arg Asn Asp Ala Ser His Leu Leu  
260 265 270

Val Phe Thr Thr Asp Ala Lys Thr His Ile Ala Leu Asp Gly Arg Leu  
275 280 285

Ala Gly Ile Val Gln Pro Asn Asp Gly Gln Cys His Val Gly Ser Asp  
290 295 300

Asn His Tyr Ser Ala Ser Thr Thr Met Asp Tyr Pro Ser Leu Gly Leu  
305 310 315 320

Met Thr Glu Lys Leu Ser Gln Lys Asn Ile Asn Leu Ile Phe Ala Val  
325 330 335

Thr Glu Asn Val Val Asn Leu Tyr Gln Asn Tyr Ser Glu Leu Ile Pro  
340 345 350

Gly Thr Thr Val Gly Val Leu Ser Met Asp Ser Ser Asn Val Leu Gln  
355 360 365

Leu Ile Val Asp Ala Tyr Gly Lys Ile Arg Ser Lys Val Glu Leu Glu  
370 375 380

Val Arg Asp Leu Pro Glu Glu Leu Ser Leu Ser Phe Asn Ala Thr Cys  
385 390 395 400

Leu Asn Asn Glu Val Ile Pro Gly Leu Lys Ser Cys Met Gly Leu Lys  
405 410 415

Ile Gly Asp Thr Val Ser Phe Ser Ile Glu Ala Lys Val Arg Gly Cys  
420 425 430

Pro Gln Glu Lys Glu Lys Ser Phe Thr Ile Lys Pro Val Gly Phe Lys  
435 440 445

Asp Ser Leu Ile Val Gln Val Thr Phe Asp Cys Asp Cys Ala Cys Gln  
450 455 460

Ala Gln Ala Glu Pro Asn Ser His Arg Cys Asn Asn Gly Asn Gly Thr  
465 470 475 480

Tyr Val Cys Gly Leu Cys Glu Cys Ser Pro Gly Tyr Leu Gly Thr Arg  
485 490 495

Cys Glu Cys Gln Asp Gly Glu Asn Gln Ser Val Tyr Gln Asn Leu Cys  
500 505 510

Arg Glu Ala Glu Gly Lys Pro Leu Cys Ser Gly Arg Gly Asp Cys Ser  
515 520 525

Cys Asn Gln Cys Ser Cys Phe Glu Ser Glu Phe Gly Lys Ile Tyr Gly  
530 535 540

Pro Phe Cys Glu Cys Asp Asn Phe Ser Cys Ala Arg Asn Lys Gly Val  
545 550 555 560

Leu Cys Ser Gly His Gly Glu Cys His Cys Gly Glu Cys Lys Cys His  
565 570 575

Ala Gly Tyr Ile Gly Asp Asn Cys Asn Cys Ser Thr Asp Ile Ser Thr  
580 585 590

Cys Arg Gly Arg Asp Gly Gln Ile Cys Ser Glu Arg Gly His Cys Leu  
595 600 605

Cys Gly Gln Cys Gln Cys Thr Glu Pro Gly Ala Phe Gly Glu Met Cys  
610 615 620

Glu Lys Cys Pro Thr Cys Pro Asp Ala Cys Ser Thr Lys Arg Asp Cys  
625 630 635 640

Val Glu Cys Leu Leu His Ser Gly Lys Pro Asp Asn Gln Thr Cys  
645 650 655

His Ser Leu Cys Arg Asp Glu Val Ile Thr Trp Val Asp Thr Ile Val  
660 665 670

Lys Asp Asp Gln Glu Ala Val Leu Cys Phe Tyr Lys Thr Ala Lys Asp  
675 680 685

Cys Val Met Met Phe Thr Tyr Val Glu Leu Pro Ser Gly Lys Ser Asn  
690 695 700

Leu Thr Val Leu Arg Glu Pro Glu Cys Gly Asn Thr Pro Asn Ala Met  
705 710 715 720

Thr Ile Leu Leu Ala Val Val Gly Ser Ile Leu Leu Val Gly Leu Ala  
725 730 735

Leu Leu Ala Ile Trp Lys Leu Leu Val Thr Ile His Asp Arg Arg Glu  
740 745 750

Phe Ala Lys Phe Gln Ser Glu Arg Ser Arg Ala Arg Tyr Glu Met Ala  
755 760 765

Ser Asn Pro Leu Tyr Arg Lys Pro Ile Ser Thr His Thr Val Asp Phe  
770 775 780

Thr Phe Asn Lys Phe Asn Lys Ser Tyr Asn Gly Thr Val Asp  
785 790 795

<210> 9  
<211> 315  
<212> PRT  
<213> Homo sapiens

<400> 9  
Met Ala Asn Cys Ser Leu Tyr Arg Ser Cys Gly Asp Cys Leu Leu Ala  
1 5 10 15

Arg Asp Pro Tyr Cys Ala Trp Ser Gly Ser Ser Cys Lys His Val Ser  
20 25 30

Leu Tyr Gln Pro Gln Leu Ala Thr Arg Pro Trp Ile Gln Asp Ile Glu  
35 40 45

Gly Ala Ser Ala Lys Asp Leu Cys Ser Ala Ser Ser Val Val Ser Pro  
50 55 60

Ser Phe Val Pro Thr Gly Glu Lys Pro Cys Glu Gln Val Gln Phe Gln  
65 70 75 80

Pro Asn Thr Val Asn Thr Leu Ala Cys Pro Leu Leu Ser Asn Leu Ala  
85 90 95

Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro Val Asn Ala Ser Ala Ser  
100 105 110

Cys His Val Leu Pro Thr Gly Asp Leu Leu Leu Val Gly Thr Gln Gln  
115 120 125

Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu Glu Gly Phe Gln Gln Leu  
130 135 140

Val Ala Ser Tyr Cys Pro Glu Val Val Glu Asp Gly Val Ala Asp Gln  
145 150 155 160

Thr Asp Glu Gly Gly Ser Val Pro Val Ile Ile Ser Thr Ser Arg Val  
165 170 175

Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp Gly Ala Asp Arg Ser Tyr  
180 185 190

Trp Lys Glu Phe Leu Val Met Cys Thr Leu Phe Val Leu Ala Val Leu  
195 200 205

Leu Pro Val Leu Phe Leu Leu Tyr Arg His Arg Asn Ser Met Lys Val

210

215

220

Phe Leu Lys Gln Gly Glu Cys Ala Ser Val His Pro Lys Thr Cys Pro  
225 230 235 240

Val Val Leu Pro Pro Glu Thr Arg Pro Leu Asn Gly Leu Gly Pro Pro  
245 250 255

Ser Thr Pro Leu Asp His Arg Gly Tyr Gln Ser Leu Ser Asp Ser Pro  
260 265 270

Pro Gly Ser Arg Val Phe Thr Glu Ser Glu Lys Arg Pro Leu Ser Ile  
275 280 285

Gln Asp Ser Phe Val Glu Val Ser Pro Val Cys Pro Arg Pro Arg Val  
290 295 300

Arg Leu Gly Ser Glu Ile Arg Asp Ser Val Val  
305 310 315

<210> 10

<211> 375

<212> PRT

<213> Homo sapiens

<400> 10

Met Glu Phe Glu Ile Thr Phe Arg Pro Asp Ser Gly Asp Gly Val Leu  
1 5 10 15

Leu Tyr Ser Tyr Asp Thr Gly Ser Lys Asp Phe Leu Ser Ile Asn Leu  
20 25 30

Ala Gly Gly His Val Glu Phe Arg Phe Asp Cys Gly Ser Gly Thr Gly  
35 40 45

Val Leu Arg Ser Glu Asp Pro Leu Thr Leu Gly Asn Trp His Glu Leu  
50 55 60

Arg Val Ser Arg Thr Ala Lys Asn Gly Ile Leu Gln Val Asp Lys Gln  
65 70 75 80

Lys Ile Val Glu Gly Met Ala Glu Gly Gly Phe Thr Gln Ile Lys Cys  
85 90 95

Asn Thr Asp Ile Phe Ile Gly Gly Val Pro Asn Tyr Asp Asp Val Lys  
100 105 110

Lys Asn Ser Gly Val Leu Lys Pro Phe Ser Gly Ser Ile Gln Lys Ile  
115 120 125

Ile Leu Asn Asp Arg Thr Ile His Val Lys His Asp Phe Thr Ser Gly  
130 135 140

Val Asn Val Glu Asn Ala Ala His Pro Cys Val Arg Ala Pro Cys Ala  
145 150 155 160

His Gly Gly Ser Cys Arg Pro Arg Lys Glu Gly Tyr Asp Cys Asp Cys  
165 170 175

Pro Leu Gly Phe Glu Gly Leu His Cys Gln Lys Ala Ile Ile Glu Ala  
 180 185 190  
 Ile Glu Ile Pro Gln Phe Ile Gly Arg Ser Tyr Leu Thr Tyr Asp Asn  
 195 200 205  
 Pro Asp Ile Leu Lys Arg Val Ser Gly Ser Arg Ser Asn Val Phe Met  
 210 215 220  
 Arg Phe Lys Thr Thr Ala Lys Asp Gly Leu Leu Leu Trp Arg Gly Asp  
 225 230 235 240  
 Ser Pro Met Arg Pro Asn Ser Asp Phe Ile Ser Leu Gly Leu Arg Asp  
 245 250 255  
 Gly Ala Leu Val Phe Ser Tyr Asn Leu Gly Ser Gly Val Ala Ser Ile  
 260 265 270  
 Met Val Asn Gly Ser Phe Asn Asp Gly Arg Trp His Arg Val Lys Ala  
 275 280 285  
 Val Arg Asp Gly Gln Ser Gly Lys Ile Thr Val Asp Asp Tyr Gly Ala  
 290 295 300  
 Arg Thr Gly Lys Ser Pro Gly Met Met Arg Gln Leu Asn Ile Asn Gly  
 305 310 315 320  
 Ala Leu Tyr Val Gly Gly Met Lys Glu Ile Ala Leu His Thr Asn Arg  
 325 330 335  
 Gln Tyr Met Arg Gly Leu Val Gly Cys Ile Ser His Phe Thr Leu Ser  
 340 345 350  
 Thr Asp Tyr His Ile Ser Leu Val Glu Asp Ala Val Asp Gly Lys Asn  
 355 360 365  
 Ile Asn Thr Cys Gly Ala Lys  
 370 375

<210> 11  
 <211> 211  
 <212> PRT  
 <213> Homo sapiens

<400> 11  
 Gln Ile Ser Ala Ala Asp Leu Asp Ser Pro Ala Ser Pro Ile Arg Tyr  
 1 5 10 15

Ser Ile Leu Pro His Ser Asp Pro Glu Arg Cys Phe Ser Ile Gln Pro  
 20 25 30

Glu Glu Gly Thr Ile His Thr Ala Ala Pro Leu Asp Arg Glu Ala Arg  
 35 40 45

Ala Trp His Asn Leu Thr Val Leu Ala Thr Glu Leu Asp Ser Ser Ala  
 50 55 60

Gln Ala Ser Arg Val Gln Val Ala Ile Gln Thr Leu Asp Lys Asn Asp  
 65 70 75 80

Asn Ala Pro Gln Leu Ala Glu Pro Tyr Asp Thr Phe Val Cys Asp Ser  
                   85                         90                         95  
  
 Ala Ala Pro Gly Gln Leu Ile Gln Val Ile Arg Ala Leu Asp Arg Asp  
                   100                         105                         110  
  
 Glu Val Gly Asn Ser Ser His Val Ser Phe Gln Gly Pro Leu Gly Pro  
                   115                         120                         125  
  
 Asp Ala Asn Phe Thr Val Gln Asp Asn Arg Asp Gly Ser Ala Ser Leu  
                   130                         135                         140  
  
 Leu Leu Pro Ser Arg Pro Ala Pro Pro Arg His Ala Pro Tyr Leu Val  
                   145                         150                         155                         160  
  
 Pro Ile Glu Leu Trp Asp Trp Gly Gln Pro Ala Leu Ser Ser Thr Ala  
                   165                         170                         175  
  
 Thr Val Thr Val Ser Val Cys Arg Cys Gln Pro Asp Gly Ser Val Ala  
                   180                         185                         190  
  
 Ser Cys Leu Pro Trp Trp Cys Ser Ser Trp Pro Cys Gly Gly Arg Ser  
                   195                         200                         205  
  
 Lys Lys His  
                   210  
  
 <210> 12  
 <211> 439  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 12  
 Gly Asp Arg Arg Pro Leu Pro Val Asp Arg Ala Ala Gly Leu Lys Glu  
     1                  5                         10                         15  
  
 Lys Thr Leu Ile Leu Leu Asp Val Ser Thr Lys Asn Pro Val Arg Thr  
     20                  25                         30  
  
 Val Asn Glu Asn Phe Leu Ser Leu Gln Leu Asp Pro Ser Ile Ile His  
     35                  40                         45  
  
 Asp Gly Trp Leu Asp Phe Leu Ser Ser Lys Arg Leu Val Thr Leu Ala  
     50                  55                         60  
  
 Arg Gly Leu Ser Pro Ala Phe Leu Arg Phe Gly Gly Lys Arg Thr Asp  
     65                  70                         75                         80  
  
 Phe Leu Gln Phe Gln Asn Leu Arg Asn Pro Ala Lys Ser Arg Gly Gly  
     85                  90                         95  
  
 Pro Gly Pro Asp Tyr Tyr Leu Lys Asn Tyr Glu Asp Glu Pro Asn Asn  
     100                 105                         110  
  
 Tyr Arg Thr Met His Gly Arg Ala Val Asn Gly Ser Gln Leu Gly Lys  
     115                 120                         125  
  
 Asp Tyr Ile Gln Leu Lys Ser Leu Leu Gln Pro Ile Arg Ile Tyr Ser

130	135	140
Arg Ala Ser Leu Tyr Gly Pro Asn Ile Gly Arg Pro Arg Lys Asn Val		
145	150	155
Ile Ala Leu Leu Asp Gly Phe Met Lys Val Ala Gly Ser Thr Val Asp		
165	170	175
Ala Val Thr Trp Gln His Cys Tyr Ile Asp Gly Arg Val Val Lys Val		
180	185	190
Met Asp Phe Leu Lys Thr Arg Leu Leu Asp Thr Leu Ser Asp Gln Ile		
195	200	205
Arg Lys Ile Gln Lys Val Val Asn Thr Tyr Thr Pro Gly Lys Lys Ile		
210	215	220
Trp Leu Glu Gly Val Val Thr Thr Ser Ala Gly Gly Thr Asn Asn Leu		
225	230	235
240		
Ser Asp Ser Tyr Ala Ala Gly Phe Leu Trp Leu Asn Thr Leu Gly Met		
245	250	255
Leu Ala Asn Gln Gly Ile Asp Val Val Ile Arg His Ser Phe Phe Asp		
260	265	270
His Gly Tyr Asn His Leu Val Asp Gln Asn Phe Asn Pro Leu Pro Asp		
275	280	285
Tyr Trp Leu Ser Leu Leu Tyr Lys Arg Leu Ile Gly Pro Lys Val Leu		
290	295	300
Ala Val His Val Ala Gly Leu Gln Arg Lys Pro Arg Pro Gly Arg Val		
305	310	315
320		
Ile Arg Asp Lys Leu Arg Ile Tyr Ala His Cys Thr Asn His His Asn		
325	330	335
His Asn Tyr Val Arg Gly Ser Ile Thr Leu Phe Ile Ile Asn Leu His		
340	345	350
Arg Ser Arg Lys Ile Lys Leu Ala Gly Thr Leu Arg Asp Lys Leu		
355	360	365
Val His Gln Tyr Leu Leu Gln Pro Tyr Gly Gln Glu Gly Leu Lys Ser		
370	375	380
Lys Ser Val Gln Leu Asn Gly Gln Pro Leu Val Met Val Asp Asp Gly		
385	390	395
400		
Thr Leu Pro Glu Leu Lys Pro Arg Pro Leu Arg Ala Gly Arg Thr Leu		
405	410	415
Val Ile Pro Pro Val Thr Met Gly Phe Phe Val Val Lys Asn Val Asn		
420	425	430
Ala Leu Ala Cys Arg Tyr Arg		
435		

<210> 13  
<211> 592  
<212> PRT  
<213> Homo sapiens

<400> 13  
Met Arg Val Leu Cys Ala Phe Pro Glu Ala Met Pro Ser Ser Asn Ser  
1 5 10 15  
Arg Pro Pro Ala Cys Leu Ala Pro Gly Ala Leu Tyr Leu Ala Leu Leu  
20 25 30  
Leu His Leu Ser Leu Ser Ser Gln Ala Gly Asp Arg Arg Pro Leu Pro  
35 40 45  
Val Asp Arg Ala Ala Gly Leu Lys Glu Lys Thr Leu Ile Leu Leu Asp  
50 55 60  
Val Ser Thr Lys Asn Pro Val Arg Thr Val Asn Glu Asn Phe Leu Ser  
65 70 75 80  
Leu Gln Leu Asp Pro Ser Ile Ile His Asp Gly Trp Leu Asp Phe Leu  
85 90 95  
Ser Ser Lys Arg Leu Val Thr Leu Ala Arg Gly Leu Ser Pro Ala Phe  
100 105 110  
Leu Arg Phe Gly Gly Lys Arg Thr Asp Phe Leu Gln Phe Gln Asn Leu  
115 120 125  
Arg Asn Pro Ala Lys Ser Arg Gly Gly Pro Gly Pro Asp Tyr Tyr Leu  
130 135 140  
Lys Asn Tyr Glu Asp Asp Ile Val Arg Ser Asp Val Ala Leu Asp Lys  
145 150 155 160  
Gln Lys Gly Cys Lys Ile Ala Gln His Pro Asp Val Met Leu Glu Leu  
165 170 175  
Gln Arg Glu Lys Ala Ala Gln Met His Leu Val Leu Leu Lys Glu Gln  
180 185 190  
Phe Ser Asn Thr Tyr Ser Asn Leu Ile Leu Thr Ala Arg Ser Leu Asp  
195 200 205  
Lys Leu Tyr Asn Phe Ala Asp Cys Ser Gly Leu His Leu Ile Phe Ala  
210 215 220  
Leu Asn Ala Leu Arg Arg Asn Pro Asn Asn Ser Trp Asn Ser Ser Ser  
225 230 235 240  
Ala Leu Ser Leu Leu Lys Tyr Ser Ala Ser Lys Lys Tyr Asn Ile Ser  
245 250 255  
Trp Glu Leu Gly Asn Glu Pro Asn Asn Tyr Arg Thr Met His Gly Arg  
260 265 270  
Ala Val Asn Gly Ser Gln Leu Gly Lys Asp Tyr Ile Gln Leu Lys Ser  
275 280 285

Leu Leu Gln Pro Ile Arg Ile Tyr Ser Arg Ala Ser Leu Tyr Gly Pro  
 290 295 300  
 Asn Ile Gly Arg Pro Arg Lys Asn Val Ile Ala Leu Leu Asp Gly Phe  
 305 310 315 320  
 Met Lys Val Ala Gly Ser Thr Val Asp Ala Val Thr Trp Gln His Cys  
 325 330 335  
 Tyr Ile Asp Gly Arg Val Val Lys Val Met Asp Phe Leu Lys Thr Arg  
 340 345 350  
 Leu Leu Asp Thr Leu Ser Asp Gln Ile Arg Lys Ile Gln Lys Val Val  
 355 360 365  
 Asn Thr Tyr Thr Pro Gly Lys Lys Ile Trp Leu Glu Gly Val Val Thr  
 370 375 380  
 Thr Ser Ala Gly Gly Thr Asn Asn Leu Ser Asp Ser Tyr Ala Ala Gly  
 385 390 395 400  
 Phe Leu Trp Leu Asn Thr Leu Gly Met Leu Ala Asn Gln Gly Ile Asp  
 405 410 415  
 Val Val Ile Arg His Ser Phe Phe Asp His Gly Tyr Asn His Leu Val  
 420 425 430  
 Asp Gln Asn Phe Asn Pro Leu Pro Asp Tyr Trp Leu Ser Leu Leu Tyr  
 435 440 445  
 Lys Arg Leu Ile Gly Pro Lys Val Leu Ala Val His Val Ala Gly Leu  
 450 455 460  
 Gln Arg Lys Pro Arg Pro Gly Arg Val Ile Arg Asp Lys Leu Arg Ile  
 465 470 475 480  
 Tyr Ala His Cys Thr Asn His His Asn Asn Tyr Val Arg Gly Ser  
 485 490 495  
 Ile Thr Leu Phe Ile Ile Asn Leu His Arg Ser Arg Lys Lys Ile Lys  
 500 505 510  
 Leu Ala Gly Thr Leu Arg Asp Lys Leu Val His Gln Tyr Leu Leu Gln  
 515 520 525  
 Pro Tyr Gly Gln Glu Gly Leu Lys Ser Lys Ser Val Gln Leu Asn Gly  
 530 535 540  
 Gln Pro Leu Val Met Val Asp Asp Gly Thr Leu Pro Glu Leu Lys Pro  
 545 550 555 560  
 Arg Pro Leu Arg Ala Gly Arg Thr Leu Val Ile Pro Pro Val Thr Met  
 565 570 575  
 Gly Phe Phe Val Val Lys Asn Val Asn Ala Leu Ala Cys Arg Tyr Arg  
 580 585 590

<210> 14  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 14  
Asp Ile Val Arg Ser Asp Val Ala Leu Asp Lys Gln Lys Gly Cys Lys  
1 5 10 15

Ile Ala Gln His Pro Asp Val Met Leu Glu Leu Gln Arg Glu Lys Ala  
20 25 30

Ala Gln Met His Leu Val Leu Leu Lys Glu Gln Phe Ser Asn Thr Tyr  
35 40 45

Ser Asn Leu Ile Leu Thr Ala Arg Ser Leu Asp Lys Leu Tyr Asn Phe  
50 55 60

Ala Asp Cys Ser Gly Leu His Leu Ile Phe Ala Leu Asn Ala Leu Arg  
65 70 75 80

Arg Asn Pro Asn Asn Ser Trp Asn Ser Ser Ser Ala Leu Ser Leu Leu  
85 90 95

Lys Tyr Ser Ala Ser Lys Lys Tyr Asn Ile Ser Trp Glu Leu Gly Asn  
100 105 110

<210> 15  
<211> 1779  
<212> DNA  
<213> Homo sapiens

<400> 15  
ATGAGGGTGC TTTGTGCCTT CCCTGAAGCC ATGCCCTCCA GCAACTCCCG CCCCCCGCG 60  
TGCCTAGCCC CGGGGGCTCT CTACTTGGCT CTGTTGCTCC ATCTCTCCCT TTCTCTCCAG 120  
GCTGGAGACA GGAGACCCTT GCCTGTAGAC AGAGCTGCAG GTTTGAAGGA AAAGACCCTG 180  
ATTCTACTTG ATGTGAGCAC CAAGAACCCA GTCAGGACAG TCAATGAGAA CTTCTCTCT 240  
CTGCAGCTGG ATCCGTCCAT CATTGATGGAT GGCTGGCTCG ATTTCTTAAG CTCCAAGCGC 300  
TTGGTGACCC TGGCCCGGGG ACTTTGCCGC GCCTTTCTGC GCTTCGGGGG CAAAGGACC 360  
GACTTCCTGC AGTTCCAGAA CCTGAGGAAC CCGGCGAAAA GCCGGGGGG CCCGGGCCCG 420  
GATTACTATC TCAAAACTA TGAGGATGAC ATTGTTCGAA GTGATGTTGC CTTAGATAAA 480  
CAGAAAGGCT GCAAGATTGC CCAGCACCC GATGTTATGC TGGAGCTCCA AAGGGAGAAG 540  
GCAGCTCAGA TGCATCTGGT TCTTCTAAAG GAGCAATTCT CCAACTTTA CAGTAATCTC 600  
ATATTAACAG CCAGGTCTCT AGACAAACTT TATAACTTG CTGATTGCTC TGGACTCCAC 660

CTGATATTTG CTCTAAATGC ACTGCGTCGT AATCCCAATA ACTCCTGGAA CAGTTCTAGT	720
GCCCTGAGTC TGTTGAAGTA CAGCGCCAGC AAAAAGTACA ACATTTCTTG GGAACTGGGT	780
AATGAGCCAA ATAACATATCG GACCATGCAT GGCCGGGCAG TAAATGGCAG CCAGTTGGGA	840
AAGGATTACA TCCAGCTGAA GAGCCTGTTG CAGCCCACATCC GGATTATTTC CAGAGCCAGC	900
TTATATGGCC CTAATATTGG CGGGCCGAGG AAGAATGTCA TCGCCCTCCT AGATGGATTC	960
ATGAAGGTGG CAGGAAGTAC AGTAGATGCA GTTACCTGGC AACATTGCTA CATTGATGGC	1020
CGGGTGGTCA AGGTGATGGA CTTCCTGAAA ACTCGCCTGT TAGACACACT CTCTGACCAG	1080
ATTAGGAAAA TTCAGAAAGT GGTTAATACA TACACTCCAG GAAAGAAGAT TTGGCTTGAA	1140
GGTGTGGTGA CCACCTCAGC TGGAGGCACA AACAAATCTAT CCGATTCCCTA TGCTGCAGGA	1200
TTCTTATGGT TGAACACTTT AGGAATGCTG GCCAATCAGG GCATTGATGT CGTGATACGG	1260
CACTCATTTC TTGACCATGG ATACAATCAC CTCGTGGACC AGAATTAA CCCATTACCA	1320
GAECTACTGGC TCTCTCTCCT CTACAAGCGC CTGATCGGCC CCAAAGTCTT GGCTGTGCAT	1380
GTGGCTGGC TCCAGCGGAA GCCACGGCCT GGCGAGTGA TCCGGGACAA ACTAAGGATT	1440
TATGCTCACT GCACAAACCA CCACAACAC AACTACGTTG GTGGGTCCAT TACACTTTT	1500
ATCATCAACT TGCATCGATC AAGAAAGAAA ATCAAGCTGG CTGGGACTCT CAGAGACAAG	1560
CTGGTTCACCA AGTACCTGCT GCAGCCCTAT GGGCAGGAGG GCCTAAAGTC CAAGTCAGTG	1620
CAACTGAATG GCCAGCCCTT AGTGATGGTG GACGACGGGA CCCTCCCAGA ATTGAAGCCC	1680
CGCCCCCTTC GGGCCGGCCG GACATTGGTC ATCCCTCCAG TCACCATGGG CTTTTTGTG	1740
GTCAAGAATG TCAATGCTTT GGCCTGCCGC TACCGATAA	1779

<210> 16  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

<400> 16	
GACATTGTTG GAAGTGTGTT GGCCTTAGAT AAACAGAAAG GCTGCAAGAT TGCCCGAGCAC	60
CCTGATGTTA TGCTGGAGCT CCAAAGGGAG AAGGCAGCTC AGATGCATCT GGTTCTTCTA	120
AAGGAGCAAT TCTCCAATAC TTACAGTAAT CTCATATTAA CAGCCAGGTC TCTAGACAAA	180
CTTTATAACT TTGCTGATTG CTCTGGACTC CACCTGATAT TTGCTCTAAA TGCACACTGCGT	240
CGTAATCCCC ATAACATCCTG GAACAGTTCT AGTGCCTGAA GTCTGTTGAA GTACAGCGCC	300
AGCAAAAAGT ACAACATTTT TTGGGAACTG GGTAAT	336